# UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF INDIANA HAMMOND DIVISION

UNITED STATES OF AMERICA,	)
and STATE OF INDIANA,	) ) Civil Action No. <u>2:22-cv-</u> 48 )
Plaintiffs,	)
v.	)
NORTHERN INDIANA PUBLIC SERVICE COMPANY LLC,	) ) )
Defendant.	,

# APPENDIX B TO CONSENT DECREE STATEMENT OF WORK FOR OPERABLE UNIT 2

# REMEDIAL DESIGN REMEDIAL ACTION STATEMENT OF WORK FOR OPERABLE UNIT 2 OF THE TOWN OF PINES SUPERFUND SITE

Town of Pines, Porter County, State of Indiana

# TABLE OF CONTENTS

1.	INTRODUCTION	
2.	COMMUNITY INVOLVEMENT	
3.	REMEDIAL DESIGN/REMEDIAL ACTION	10
4.	REPORTING	24
5.	DELIVERABLES	2:
6.	SCHEDULES	32
7.	STATE PARTICIPATION	32
8.	REFERENCES	3:

#### 1. INTRODUCTION

**1.1 Purpose of the SOW**. This Statement of Work ("SOW") sets forth the procedures and requirements for implementing the Work.

#### 1.2 Structure of the SOW

- Section 2 (Community Involvement) sets forth EPA's and SD's responsibilities for community involvement.
- Section 3 (Remedial Design/Remedial Action) sets forth the process for developing the RD, which includes the submission of specified primary Deliverables and the requirements for the completion of the RA for OU 2 which includes the submission of specified primary Deliverables and supporting Deliverables.
- Section 4 (Reporting) sets forth SD's reporting obligations.
- Section 5 (Deliverables) describes the content of the supporting Deliverables and the general requirements regarding SD's submission of, and EPA's review of, approval of, comment on, and/or modification of, the Deliverables.
- Section 6 (Schedules) sets forth the schedule for submitting the primary Deliverables, specifies the supporting Deliverables that must accompany each primary Deliverable, and sets forth the schedule of milestones regarding the completion of the RA.
- Section 7 (State Participation) addresses State participation.
- Section 8 (References) provides a list of references, including URLs.
- 1.3 The terms used in this SOW that are defined in CERCLA, in regulations promulgated under CERCLA, or in the CD, have the meanings assigned to them in CERCLA, in such regulations, or in the CD, except that the term "Paragraph" or "¶" means a paragraph of the SOW, and the term "Section" means a section of the SOW, unless otherwise stated.
- 1.4 The Scope of the Remedy for OU 2. The Scope of Remedy for OU 2 consists, with respect to the CD Properties Remaining to be Sampled, CD Properties to be Remediated, and CD Completed Properties with Institutional Controls of a soil component ("OU 2 RA Soil Component") which includes the following soil components identified here and described below: (1) the soil remedial action components described in Part 1, Section 4.0 and Part 2, Section 19.0, Subsection B of the ROD; (2) continuation of the process established under the ASAOC and Section V of the 2020 ESD; and (3) with respect to the ASAOC Completed Properties with Institutional Controls, the remedy includes the ongoing obligations related to contingencies of such Properties. The Scope of the Remedy for OU 2 also includes a groundwater, surface water, and sediment monitoring component ("OU 2 RA Groundwater, Surface Water, and Sediment Component"). Specifically, it involves groundwater monitoring for the area north of the East Branch of Brown Ditch, and east of the Main Branch of Brown Ditch, and surface water and sediment sampling in the East Branch of Brown Ditch, as described below.

#### **OU 2 RA Soil Component**

- (a) SD shall conduct the OU 2 RA Soil Component which shall include, but is not limited to, the following activities listed in (1) (6) below.
  - (1) **Outreach and sampling**. These activities include:
    - (i) conducting outreach to owners of CD Properties Remaining to be Sampled to gain access to sample soil for contaminants of concern ("COCs") arsenic, thallium, and lead at such Properties;
    - (ii) sampling for arsenic, thallium, and lead in accordance with the EPA Field Sampling Plan for Soil required by ¶ 5.7(d) of this SOW; and
    - (iii) using the sampling results to identify CD Properties to be Remediated.
  - (2) **Plans and other documentation**. At each CD Property to be Remediated, SD shall:
    - (i) initiate discussion with owner to obtain access;
    - (ii) conduct a title search and land surveying activities to locate boundaries and other pertinent features as needed for the preparation of property-specific RD drawings ("Remedial Design Package");
    - (iii) prepare and implement plans for site security and access control, erosion, and sedimentation controls, decontamination activities, staging, support area, and site preparation activities;
    - (iv) prepare Remedial Design Package for submittal to EPA and IDEM prior to initiation of soil remediation;
    - (v) submit to EPA for review a proposed letter to the owner documenting pre- and post-excavation conditions and remediation performed, including post-excavation confirmatory soil sampling, the activities conducted at such Property, and all laboratory data gathered before, during, and after the RA activities; and
    - (vi) following EPA review of the proposed letter and approval of presentation of data (excludes validation of data), submit the letter to the owner.
  - (3) **Excavation and disposal activities**. At each CD Property to be Remediated, SD shall:

- (i) excavate and stage for off-site disposal contaminated soil at a target depth of no less than three feet where sampling shows arsenic, thallium, and/or lead above soil cleanup levels of 30.1 ppm, 1.9 ppm, and 400 ppm, respectively ("soil cleanup levels"), in accordance with the Remedial Design/Remedial Action Work Plan ("RDRAWP") approved under this SOW, as described in Section 3.1;
- (ii) due to specific Property design details, if applicable and approved by EPA, leave contaminated soils with COCs above soil cleanup levels at a depth of less than three feet as long as the contamination does not present a risk to human health or the environment;
- (iii) due to specific Property design details, leave contaminated soils with COCs above cleanup levels in place if they are located (1) under or immediately adjacent to buildings, roadways, in-ground pools, or utilities and removal will compromise the structural integrity of these features; (2) in inaccessible areas, including under paved driveways and walkways; or (3) in rights of way to the extent the excavation of such soils will compromise the physical integrity or function of an adjacent street or utilities.
- (iv) install a permanent, water-permeable visual barrier in the excavation area to demarcate the presence of contaminated soils with COCs above soil cleanup levels left at depth or, in situations where installation of a barrier is not feasible, document the contamination's location by other means such as an institutional control and/or letter;
- (v) dispose of contaminated soils at a RCRA/CERCLA approved disposal facility in accordance with the EPA Off-Site Rule (40 C.F.R. § 300.440);
- (vi) take such other actions as may be necessary or appropriate to complete excavation of soils contaminated with arsenic, thallium, and/or lead in excess of soil cleanup levels; and
- (vii) safely stage and dispose of the excavated soils.

#### (4) Restoration activities.

At each CD Property to be Remediated, SD shall restore Property to preremedial conditions to the extent practicable or, if the Property owner agrees, provide payment to the Property owners sufficient to cover the costs of restoring Property to pre-remedial conditions. Restoration shall include but not be limited to backfilling excavated areas with clean fill material and topsoil; laying sod or planting other appropriate ground cover, shrubs, trees, or other vegetation; ensuring that restoration of vegetation is successful, repairing or replacing concrete or other paved areas and repairing damage to structures or appurtenances caused from soil remedial activities.

#### (5) Contingencies.

- (i) Upon notification from an owner or Easement Holder of CD Completed Properties with Institutional Controls or ASAOC Completed Properties with Institutional Controls that he or she wishes to remove, excavate, or disturb any soil, structure, utility fixture, facility, or improvement located in soil with COCs above soil cleanup levels, SD shall prepare and implement a soil management, excavation, and disposal plan for such Property consistent with the ROD, the ESD, this SOW, the RDRAWP, and as required by applicable law. SD shall provide written notice via email to EPA to review, comment, and make changes to the plan. After providing EPA with no less than 7 business Days to comment and taking up to 7 business Days to incorporate any comments from EPA, SD shall implement the soil management, excavation, and disposal plan. SD shall only be responsible for the portions of the restoration work that are necessary due solely to the work needed as a result of the presence of CCRs.
- (ii) In addition to the obligations in the preceding paragraph, if removal, excavation, or disturbance of any soil, structure, utility fixture, facility, or improvement located in soil with COCs above soil cleanup levels will require obtaining a permit from the appropriate permitting authority to repair, modify, or replace an existing septic system or to install a new septic system at such Property, and such septic system project will require replacing contaminated soil with COCs above soil cleanup levels or the clean fill material previously placed on the CD Completed Properties with Institutional Controls or ASAOC Completed Properties with Institutional Controls by SD, then SD's obligations shall be limited to:
  - (A) properly excavating and replacing the contaminated soils and/or clean fill material at such Property, as required by the permitting authority, and requested by the Property owner's licensed contractor;
  - (B) providing the Property owner with clean replacement fill for the project;

- (C) coordinating with the Property owner's licensed contractor or the Property owner regarding the scheduling for excavation and backfilling work;
- (D) disposing of the contaminated soils and/or clean fill material; and
- (E) reimbursing the Property owner for the incremental costs incurred in obtaining and/or implementing a septic system permit, which costs are due to the contaminated nature of the soils with COCs above soil cleanup levels, or the physical characteristics of clean fill material placed by SD as part of the RA.
- (iii) SD's obligations related to a septic system project, as described in (ii) above, shall continue until the replacement of an existing septic system or installation of a new septic system at such Property would not necessitate excavating any additional contaminated soils or clean fill materials and replacing them with a replacement fill, as required by applicable law or the permitting authority.

#### (6) **Institutional Controls**.

- (i) SD shall execute an Environmental Restrictive Covenant ("ERC") enforceable by SD, EPA, as third-party beneficiary, and IDEM, with each owner of a CD Completed Properties with Institutional Controls. Each ERC shall be consistent with the ROD and this SOW and shall:
  - (A) restrict digging or other disturbance of any contaminated soils with COCs above soil cleanup levels that remain in place following the conclusion of the soil RA at such Property;
  - (B) restrict any disturbance of the visual barrier used to demarcate the presence of contaminated soils with COCs above soil cleanup levels left at depth;
  - (C) inform, if applicable, the owner of the location of contaminated soils with COCs above soil cleanup levels where installation of a barrier is not feasible; and
  - (D) inform the owner of SD's obligations if the owner wishes to remove, excavate, or disturb any soil, structure, utility fixture, facility, or improvement located in contaminated soil with COCs above soil cleanup levels.

- (ii) If an owner is unwilling to enter into an ERC, then SD shall coordinate with EPA, IDEM, and/or local authorities to execute deed notices or an ordinance, as appropriate and to the extent permissible under local law, to ensure the remedy is protective.
- (iii) SD shall also include access to CD Completed Properties with Institutional Controls in the ERC for SD, EPA, and IDEM to sample, inspect, monitor, carry out the RA, and ensure the short- and long-term effectiveness of the remedy and for carrying out obligations under Sections VIII of the CD (Property Requirements), ICs obligations as provided in the Institutional Control Implementation and Assurance Plan ("ICIAP"), and obligations to address contingencies at CD Completed Properties with Institutional Control as summarized in ¶ 1.4(a)(5), as applicable.
- (iv) SD shall prepare and submit to EPA for approval an ICIAP that describes how the ICs shall be implemented, maintained enforced, modified, and terminated (if applicable) as required by ¶ 5.7(i) of this SOW, including SD's obligations at ASAOC Completed Properties with Institutional Controls.

#### OU 2 RA Groundwater, Surface Water, and Sediment Component.

- (b) SD shall conduct OU 2 RA Groundwater, Surface Water, and Sediment Component including conducting the activities set forth in (1)-(5) below. Groundwater, surface water and sediment shall be monitored for COCs and other contaminants, which shall be set forth in the RDRAWP, that are associated with coal ash present at the Site ("CCR Constituents") in the area of the East Branch of Brown Ditch, and east of the Main Branch of Brown Ditch. COCs include arsenic, boron, and molybdenum in groundwater. The OU 2 RA Groundwater, Surface Water and Sediment Component includes:
  - (1) establishing a network of groundwater monitoring wells that extends in the area north of the East Branch of Brown Ditch, and east of the Main Branch of Brown Ditch within the Area of Investigation (as defined in the RI) and the nearby vicinity as approved by EPA, which shall include existing monitoring wells and additional monitoring wells, as necessary or appropriate;
  - conducting annual long-term groundwater monitoring for COCs and other CCR Constituents to ensure that COCs are decreasing to below "Groundwater Cleanup Levels" of 4 milligrams per liter ("mg/L") boron, 0.01 mg/L for arsenic, and 0.1 mg/L for molybdenum as specified in the ROD and that COCs and other CCR Constituents are not increasing in concentration, expanding in extent, or migrating off-site, particularly

- toward the Indiana Dunes National Lakeshore and areas where drinking water wells are located; continued groundwater monitoring will be evaluated no less frequently than every five years; such monitoring will be conducted in accordance with the Field Sampling Plan for Groundwater, Surface Water, and Sediments required by ¶ 5.7(c) of the SOW;
- (3) conducting annual monitoring of surface water and sediments for groundwater COCs and other CCR Constituents, as determined by EPA following a reasonable opportunity for review and comment by IDEM, to ensure that ecological habitats continue to not be adversely affected by Site contamination;
- (4) conducting periodic monitoring at certain residential drinking water wells identified by EPA for COCs and other CCR Constituents, following a reasonable opportunity for review and comment by IDEM. Selection of wells for long term monitoring will initially be determined during the RD, but the list of wells to be monitored may be expanded or contracted as determined by EPA review of the data following a reasonable opportunity for review and comment by IDEM; and
- (5) submitting annual reporting of monitoring data submitted to EPA and IDEM.
- ordinance, and/or use best efforts to implement equivalent restrictions, consistent with the ROD and this SOW that prohibits the use or installation of private drinking water wells in the vicinity of the two wells identified in the ROD that are located within OU 2 MW106 and MW111—and anywhere else in the OU 2 groundwater monitoring area where groundwater contamination from CCR migrating from the Town of Pines Superfund Site has come to be located, to the extent groundwater contamination exists in those areas above Performance Standards.

#### 2. COMMUNITY INVOLVEMENT

#### 2.1 Community Involvement Responsibilities

(a) EPA has the lead responsibility for developing and implementing community involvement activities at the Site. EPA issued a Community Involvement Plan ("CIP") for the Site in December 2004 and updated it in August 2013. Pursuant to 40 C.F.R. § 300.435(c), EPA shall review the existing CIP and determine whether it shall be revised to describe further public involvement activities during the Work that are not already addressed or provided for in the existing CIP, including, if applicable, the use of a Technical Assistance Plan.

- (b) EPA's revised CIP may require SD to conduct community involvement activities. SD shall implement any community involvement activities that the CIP delegates to it. All community involvement activities conducted by SD pursuant to EPA's CIP are subject to EPA's oversight.
- (c) SD shall conduct the following actions set forth in (1)-(9) below to address the OU 2 RA Soil Component, as described in Section 3 of this SOW:
  - (1) using tax maps for the county, identify the CD Properties Remaining to be Sampled and the owners, and addresses;
  - of the CD Properties Remaining to be Sampled, identify those Properties that are developed and those that are not developed; and
  - (3) conduct a community notification program that follows up on previous efforts to inform the community of the soil sampling program and to recruit Properties to be sampled, that includes:
    - (i) publishing a notice in the local newspapers about the soil sampling program;
    - (ii) sending a community mailing about the soil sampling program; and
    - (iii) in conjunction with EPA, conducting a community meeting about the soil sampling program.
  - (4) For CD Properties Remaining to be Sampled within OU 2, SD shall transmit a written communication to the owner of each such Property requesting access to sample soils at the Property in accordance with the ROD, ESD, and this SOW. The communication shall include an access agreement that the owner can execute to grant access for soil sampling. The written communication shall be subject to advance approval by EPA. As requested by EPA, SD shall provide follow-up, written communication to Property owners if the first attempt is not successful.
  - (5) For CD Properties Remaining to be Sampled, SD shall make best efforts to conduct telephone or video communication with the owner of the Property to discuss soil sampling and potential remediation of soils contaminated with Site contaminants at the Property and to request that the owner give written consent to access for such sampling. If these efforts are not successful, SD shall make best efforts to conduct face-to-face communications with the owner. As requested by EPA, SD shall provide follow-up communication to Property owners if needed.

- (6) After using best efforts in Section 2.1(c)(5) above to obtain access for soil sampling, SD will report to EPA those Properties where access has not been granted, the attempts made to obtain access and the response or lack of response to SD's communication for access.
- (7) For CD Properties Remaining to be Sampled where sampling is initiated, SD shall communicate regularly with the owner of such Property about specific sampling plans.
- (8) SD will use best efforts to gain access to CD Properties to be Remediated, to conduct excavation, disposal, and restoration activities, which may include written, telephone or video, or face-to-face communication. For CD Properties to be Remediated where access is not granted following such best efforts, SD will report those Properties to EPA.
- (9) For CD Properties to be Remediated for which access is granted to conduct excavation, disposal, and restoration activities, SD shall also communicate regularly with the owner of such Property, regarding soil excavation plans if any, and restoration plans for such Property, prior to, during and after such activities.
- (d) If requested by EPA, SD shall participate in additional community involvement activities, including participation in (1) preparing information regarding the Work for dissemination to the public, with consideration given to including mass media and/or Internet notification; (2) preparing and placing newspaper notices; (3) personal contact with owners of Property within OU 2 in addition to the personal contact described in ¶ 2.1(c) above; and (4) public meetings that may be held or sponsored by EPA to explain activities at or relating to OU 2. SD's support of EPA's community involvement activities may include providing online access to initial submissions and updates of Deliverables to any Community Advisory Groups and any other entities specified by EPA to provide them with a reasonable opportunity for review and comment.
- (e) Upon EPA's request, SD shall establish a community information repository at or near the Site to house one copy of the administrative record or add Site documents to an existing information repository as specified by EPA.
- (f) **SD's CI Coordinator**. If requested by EPA, SD shall, within 15 Days of the date of EPA's issuance of such request, designate and notify EPA of SD's Community Involvement Coordinator ("SD's CI Coordinator"). SD may hire a contractor for this purpose. SD's notice must include the name, title, and qualifications of the SD's CI Coordinator. SD's CI Coordinator is responsible for providing support regarding EPA's community involvement activities, including coordinating with EPA's CI Coordinator regarding responses to the public's inquiries about OU 2.

# 2.2 SD's Responsibilities for Technical Assistance

- (a) If EPA requests, SD shall arrange for a qualified community group to receive the services of a technical advisor(s) who can: (i) help group members understand OU 2 cleanup issues (specifically, to interpret and comment on OU 2-related documents developed under this SOW); and (ii) share this information with others in the community. The technical advisor(s) will be independent from the SD. SD's TAP assistance will be limited to \$50,000, except as provided in ¶ 2.2(d)(3), and will end when EPA issues the Certification of Work Completion under ¶ 3.10. SD shall implement this requirement under a Technical Assistance Plan ("TAP").
- (b) If EPA requests, SD shall cooperate with EPA in soliciting interest from community groups regarding a TAP at OU 2. If more than one community group expresses an interest in a TAP, SD shall cooperate with EPA in encouraging the groups to submit a single, joint application for a TAP.
- (c) If EPA requests, SD shall, within 30 Days, submit a proposed TAP for EPA approval. The TAP must describe the SD's plans for the qualified community group to receive independent technical assistance. The TAP must include the following elements:
  - (1) For SD to arrange for publication of a notice in local media that they have received a Letter of Intent ("LOI") to submit an application for a TAP. The notice shall explain how other interested groups may also try to combine efforts with the LOI group or submit their own applications, by a reasonable specified deadline;
  - (2) For SD to review the application(s) received and determine the eligibility of the community group(s). The proposed TAP must include eligibility criteria as follows:
    - (i) A community group is eligible if it is: (a) comprised of people who are affected by the release or threatened release at OU 2, and (b) able to demonstrate its ability to adequately and responsibly manage TAP-related responsibilities.
    - (ii) A community group is ineligible if it is: (a) a potentially responsible party ("PRP") at OU 2, represents such a PRP, or receives money or services from a PRP (other than through the TAP); (b) affiliated with a national organization; (c) an academic institution; (d) a political subdivision; (e) a tribal government; or (f) a group established or presently sustained by any of the above ineligible entities; or (g) a group in which any of the above ineligible entities is represented.

- (3) For SD to notify EPA of its determination on eligibility of the applicant group(s) to ensure that the determination is consistent with the SOW before notifying the group(s);
- (4) If more than one community group submits a timely application, for SD to review each application and evaluate each application based on the following elements:
  - (i) the extent to which the group is representative of those persons affected by OU 2; and
  - (ii) the effectiveness of the group's proposed system for managing TAP-related responsibilities, including its plans for working with its technical advisor and for sharing OU 2-related information with other members of the community.
- (5) For SD to document their evaluation of, and their selection of, a qualified community group, and to brief EPA regarding their evaluation process and choice. EPA may review SD's evaluation process to determine whether the process satisfactorily follows the criteria in ¶ 2.2(c)(4). TAP assistance may be awarded to only one qualified group at a time;
- (6) For SD to notify all applicant(s) about SD's decision;
- (7) For SD to designate a person (TAP Coordinator) to be their primary contact with the selected community group;
- (8) A description of SD's plans to implement the requirements of ¶ 2.2(d) (Agreement with Selected Community Group); and
- (9) For SD to submit quarterly progress reports regarding the implementation of the TAP.

#### (d) Agreement with Selected Community Group

(1) SD shall negotiate an agreement with the selected community group ("Community Group") that specifies the duties of SD and the community group. The agreement must specify the activities that may be reimbursed under the TAP and the activities that may not be reimbursed under the TAP. The list of allowable activities must be consistent with 40 C.F.R. § 35.4070 (e.g., obtaining the services of an advisor to help the group understand the nature of the environmental and public health hazards at OU 2 and the various stages of the response action, and communicating OU 2 information to others in the community). The list of non-allowable activities must be consistent with 40 C.F.R. § 35.4075 (e.g., activities related to litigation or political lobbying).

- (2) The agreement must provide that SD's review of the Community Group's recommended choice for Technical Advisor will be limited, consistent with 40 C.F.R. § § 35.4190 and 35.4195, to criteria such as whether the advisor has relevant knowledge, academic training, and relevant experience as well as the ability to translate technical information into terms the community can understand.
- (3) The agreement must provide that the Community Group is eligible for additional TAP assistance, if it can demonstrate that it has effectively managed its TAP responsibilities to date, and that at least three of the following 10 factors are satisfied:
  - (i) EPA expects that more than eight years (beginning with the initiation of the RI/FS) will pass before construction completion will be achieved;
  - (ii) EPA requires treatability studies or evaluation of new and innovative technologies;
  - (iii) EPA reopens the ROD;
  - (iv) the public health assessment (or related activities) for the Site indicates the need for further health investigations and/or health-related activities:
  - (v) after SD's selection of the Community Group for the TAP, EPA designates additional operable units at the Site;
  - (vi) EPA issues an Explanation of Significant Differences for the ROD;
  - (vii) after SD's selection of the Community Group, a legislative or regulatory change results in significant new Site information;
  - (viii) significant public concern about the OU 2 exists, as evidenced, e.g., by relatively large turnout at meetings, the need for multiple meetings, the need for numerous copies of documents to inform community members, etc.;
  - (ix) any other factor that, in EPA's judgment, indicates that the OU 2 is unusually complex; or
  - (x) a RI/FS costing at least \$2 million was performed at the Site.
- (4) SD is entitled to retain any unobligated TAP funds upon EPA's Certification of Work Completion under ¶ 3.10.

(5) SD shall submit a draft of the proposed agreement to EPA for its comments.

#### 3. REMEDIAL DESIGN/REMEDIAL ACTION

- **3.1** Remedial Design/Remedial Action Work Plan ("RDRAWP"). SD shall submit a RDRAWP for the OU 2 Soil Component to EPA for approval. The RDRAWP must include:
  - (a) plans for implementing all RD activities identified in this SOW, in the RDRAWP, or required by EPA to be conducted to develop the RD;
  - (b) a description of the overall management strategy for performing the RD, including a proposal for phasing of design and construction, if applicable;
  - (c) a description of the proposed general approach to contracting, construction, operation, maintenance, and monitoring of the RA as necessary to implement the Work;
  - (d) a description of the responsibility and authority of all organizations and key personnel involved with the development of the RD/RA;
  - (e) descriptions of any applicable permitting requirements and other regulatory requirements;
  - (f) plans for satisfying permitting requirements, including obtaining permits for off-site activity and for satisfying substantive requirements of permits for on-site activity;
  - (g) a description of plans for obtaining access in connection with the Work, such as Property acquisition, Property leases, and/or easements;
  - (h) the following supporting Deliverables described in ¶ 5.7 ("Supporting Deliverables"): Health and Safety Plan; Emergency Response Plan; Field Sampling Plans for Soil and for Groundwater, Surface Water, and Sediments; Affected Property Dust Monitoring Plan; Construction Quality Assurance/Quality Control Plan; and Transportation and Off-Site Disposal Plan;
  - (i) a description of any areas requiring clarification and/or anticipated problems (e.g. data gaps);
  - (j) identification of all COCs and other CCR Constituents to be monitored in groundwater, surface water, and/or sediments and the Performance Standards for these monitored constituents;

- (k) a description of how the RA for OU 2 will be implemented in a manner that minimized environmental impacts in accordance with EPA's Principles for Greener Cleanups (Aug. 2009);
- (l) a description of monitoring and control measures to protect human health and the environment, such air monitoring and dust suppression, during the construction and implementation of the RA for OU 2;
- (m) a proposed schedule for outreach of all RA activities and Deliverables for OU 2;
- (n) a specification for photographic documentation of the RA for OU 2;
- (o) an operational list to be provided to EPA and IDEM quarterly or as otherwise specified by EPA or IDEM of CD Properties Remaining to be Sampled, CD Properties to be Remediated, CD Completed Properties, CD Completed Properties with Institutional Controls, and any other Affected Properties, including Properties already sampled under the CD, with a schedule for periodically updating the list to include Properties that will be subsequently identified;
- (p) a list of ASAOC Completed Properties and ASAOC Completed Properties with Institutional Controls as of the due date of the RDRAWP;
- (q) a provision that ongoing obligations related to contingencies extends to ASAOC Completed Properties with Institutional Controls;
- (r) provisions to address contingencies at CD Completed Properties with Institutional Control; and
- (s) an updated health and safety plan that covers activities during the RA per ¶5.7(a).
- 3.2 SDs shall meet regularly with EPA to discuss RD/RA issues as necessary, as directed or determined by EPA.
- 3.3 RD Packages. For CD Properties to be Remediated, a RD Package will be prepared, subsequent to SD being granted access to each Property, that will include:
  - (a) a complete set of construction drawings that are: (1) certified by a registered professional engineer; and (2) suitable for construction;
  - (b) a survey and engineering drawings showing existing OU 2 features, such as utilities, Property boundaries, easements, and OU 2 conditions;
  - (c) location of perimeter air monitoring stations;
  - (d) haul routes for off-site disposal and borrow transportation; and
  - (e) a proposed schedule to complete the RA for OU 2 ("RA Schedule").

#### 3.4 Meetings and Inspections.

- (a) **Preconstruction Conference**. SD shall hold a preconstruction conference with EPA, IDEM, and others as directed or approved by EPA and as described in the *Remedial Design/Remedial Action Handbook*, EPA 540/R-95/059 (June 1995). SD shall prepare minutes of the conference and shall distribute the minutes to all Parties.
- (b) **Periodic Meetings**. During the RA for OU 2, SD shall meet regularly with EPA and others as directed or determined by EPA, to discuss project issues. SD shall distribute an agenda and list of attendees to all Parties prior to each meeting. SD shall prepare minutes of the meetings and shall distribute the minutes to all Parties.

#### (c) Inspections.

- (1) EPA, IDEM, or their representatives may conduct periodic inspections of and/or have an on-site presence during the soil removal component of the Work. At EPA's or IDEM's request, the Supervising Contractor or other designee shall accompany EPA, IDEM, or their representatives during inspections.
- (2) Upon notification by EPA of any deficiencies in the RA Construction, SD shall take all necessary steps to correct the deficiencies and/or bring the Work into compliance with the approved Final RDRAWP, and/or any approved Remedial Design Package changes. If applicable, SD shall comply with any schedule provided by EPA in its notice of deficiency.

#### 3.5 Emergency Response and Reporting.

- (a) Emergency Response and Reporting. If any event occurs during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment, SD shall: (1) immediately take all appropriate action to prevent, abate, or minimize such release or threat of release; (2) immediately notify the authorized EPA officer (as specified in ¶ 3.5(c)) orally; and (3) take such actions in consultation with the authorized EPA officer and in accordance with all applicable provisions of the Health and Safety Plan, the Emergency Response Plan and any other Deliverable approved by EPA under the SOW.
- (b) **Release Reporting**. Upon the occurrence of any event during performance of the Work that SD is required to report pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004, SD shall immediately notify the

- authorized EPA officer orally, in addition to the National Response Center if applicable.
- (c) The "authorized EPA officer" for purposes of immediate oral notifications and consultations under ¶ 3.5(a) and ¶ 3.5(b) is the EPA Project Coordinator, the EPA Alternate Project Coordinator (if the EPA Project Coordinator is unavailable), or IDEM's Site Manager (if neither EPA Project Coordinator is available).
- (d) For any event covered by ¶ 3.5(a) and ¶ 3.5(b), SD shall: (1) within 14 Days after the onset of such event, submit a report to EPA describing the actions or events that occurred and the measures taken, and to be taken, in response thereto; and (2) within 30 Days after the conclusion of such event, submit a report to EPA describing all actions taken in response to such event.
- (e) The reporting requirements under ¶ 3.5 are in addition to the reporting required by CERCLA § 103 or EPCRA § 304.

#### 3.6 Off-Site Shipments

- (a) SD may ship hazardous substances, pollutants, and contaminants from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. SD will be deemed to be in compliance with CERCLA § 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if SD obtains a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 300.440(b).
- (b) SD may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, it provides notice to the appropriate state environmental official in the receiving facility's state and to the EPA Project Coordinator. This notice requirement will not apply to any off- Site shipments when the total quantity of all such shipments does not exceed 10 cubic yards. The notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. SDs also shall notify the state environmental official referenced above and the EPA Project Coordinator of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. SD shall provide the notice after the award of the contract for RA construction and before the Waste Material is shipped.
- (c) SD may ship Investigation Derived Waste ("IDW") from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA, 42 U.S.C. § 9621(d)(3), 40 C.F.R. § 300.440, EPA's Guide to Management of Investigation Derived Waste, OSWER 9345.3-03FS (Jan. 1992), and any IDW-specific requirements contained in the ROD. Wastes shipped off-Site to a laboratory for

characterization, and RCRA hazardous wastes that meet the requirements for an exemption from RCRA under 40 C.F.R. § 261.4(e) shipped off-site for treatability studies, are not subject to 40 C.F.R. § 300.440.

## 3.7 RA Construction Completion for OU 2.

- (a) OU 2 RA Groundwater, Surface Water, and Sediment Component. For purposes of the OU 2 Groundwater, Surface Water, and Sediment Component of the remedy, "RA Construction Completion" includes the long-term groundwater, surface water, and sediment monitoring system, and EPA's determination that the system is functioning properly and as designed.
  - (1) EPA will determine if the groundwater, surface water, and sediment monitoring system meets the requirements of the Field Sampling Plan for Groundwater, Surface Water, and Sediment ("Groundwater, Surface Water, and Sediment FSP") as in ¶5.7(c).
  - (2) If new wells are required to be installed for the OU 2 Groundwater, Surface Water, and Sediment Component, a "Groundwater Construction Completion Report" will be submitted requesting EPA's determination that construction for the long-term monitoring system has been completed. The Groundwater Construction Completion Report will include the information on the construction of the new groundwater monitoring wells, and the information on the assessment of the existing monitoring wells. The Groundwater Construction Completion Report must: (1) include statements by registered professional engineer or geologist and by SD's Project Coordinator that construction of the long-term monitoring system is complete and that the system is functioning properly and as designed; (2) included well diagrams and boring logs for all wells used for the longterm monitoring system; (3) be prepared in accordance with Chapter 2 (Remedial Action Completion) of EPA's Close Out Procedures for NPL Site guidance (May 2011), as supplemental Guidance for Management of Superfund Remedies in Post Construction, OLEM 9200.3-105 (Feb. 2017); and (4) be certified in accordance with ¶5.5.
  - (3) If EPA determines that construction of the OU 2 RA Groundwater, Surface Water, and Sediment Component is not complete, EPA shall so notify SD. EPA's notice shall include a description of, and schedule for, the activities that SD must perform to complete the Groundwater and Surface Water Component. EPA's notice may include a schedule for completion of such activities or may require SD to submit a proposed schedule for EPA approval. SD shall perform all activities described in the EPA notice in accordance with the schedule.
  - (4) If EPA determines, based on an initial or any subsequent Groundwater Construction Completion Report, that the construction of the OU 2 RA

Groundwater, Surface Water, and Sediment Component is complete, EPA shall so notify SD.

- (b) Soil Component of the Remedy. For purposes of the soil component, RA Construction Completion marks the completion of remedial activities at a specific Property that has been remediated as part of CD Properties to be Remediated and, if applicable, that has an ERC as part of CD Completed Properties with Institutional Controls. Construction shall be deemed complete at a particular CD Property to be Remediated or CD Completed Property with Institutional Controls after all soil excavation, replacement fill, restoration, confirmation sampling, and, if applicable, institutional controls have been implemented and validated results received for that Property.
- (c) Following completion of the OU 2 RA Soil Component at a CD Property to be Remediated, and, if requested by EPA, an inspection under ¶3.8(a)(1), SD shall submit a report ("RA Report") for this particular Property to EPA requesting EPA's approval of the completion of the OU 2 Soil Component for the specific Property. The RA Report for each Property must: (1) include certifications by a registered professional engineer and by SD's Project Coordinator that the soil portion of the RA is complete; (2) include as-built drawings signed and stamped by a registered professional engineer; (3) be prepared in accordance with Chapter 2 (Remedial Action Completion) of EPA's Close Out Procedures for NPL Sites guidance (May 2011), as supplemented by Guidance for Management of Superfund Remedies in Post Construction, OLEM 9200.3-105 (Feb. 2017); and (4) be certified in accordance with ¶5.5.
- (d) After construction is completed at such properties, SD shall prepare and provide to EPA for review and comment, in accordance with Section 5 of this SOW, a confirmation letter addressed to the Property owner(s) summarizing all activities that were conducted and including all sampling data.
- (e) SD shall provide the EPA-approved confirmation letter to the Property owner for such Property.

#### 3.8 Certification of RA Completion for OU 2.

- (a) OU 2 RA Groundwater, Surface Water, and Sediment Component of the Remedy.
  - (1) **Final Monitoring Report**. The OU 2 RA Groundwater, Surface Water, and Sediment Component is "Complete" for purposes of this ¶ 3.8(a) when it has been fully performed and the Performance Standards have been achieved and sufficient data have been gathered to demonstrate the Performance Standards will be maintained. SD shall submit a Final Monitoring Report to EPA requesting EPA's approval of Completion of the OU 2 RA Groundwater, Surface Water, and Sediment Component.

The report must: (1) include certifications by a registered professional engineer or geologist and by SD's Project Coordinator that the OU 2 RA Groundwater, Surface Water, and Sediment Component is complete; (2) be prepared in accordance with Chapter 2 (Remedial Action Completion) of EPA's Close Out Procedures for NPL Sites guidance (May 2011), as supplemented by Guidance for Management of Superfund Remedies in Post Construction, OLEM 9200.3-105 (Feb. 2017); (3) contain monitoring data to demonstrate that Performance Standards have been achieved and will continue to be maintained; and (4) be certified in accordance with ¶ 5.5 (Certification).

# (b) Soil Component of the Remedy.

- (1) The OU 2 RA Soil Component is "Complete" for purposes of this ¶ 3.8(b) when it has been fully performed and the Performance Standards have been achieved at all CD Properties Remaining to be Sampled, CD Properties to be Remediated, and CD Completed Properties with Institutional Controls through cleanup activities, restoration activities, and/or institutional controls for those Properties where access has been provided. For those CD Properties Remaining to be Sampled within OU 2, CD Properties to be Remediated, and CD Completed Properties with Institutional Controls where access has not been provided, the OU 2 RA Soil Component is Complete (1) after EPA and IDEM determine that SD has made best efforts to secure access, and use restriction agreements and proprietary controls; or (2) if EPA or IDEM have taken independent action to secure access and SD has fully performed the OU 2 RA Soil Component and the Performance Standards have been achieved. If directed by EPA, SD shall schedule an inspection of such Properties for the purpose of obtaining EPA's approval of the Completion of the OU 2 RA Soil Component of the RA for OU 2. The inspection must be attended by SD and EPA and/or their representatives. IDEM shall also be notified in advance of the inspection.
- RA Report for OU 2 RA Soil Component. Following the completion of the soil sampling, soil excavations, restoration activities and/or implementation of institutional controls under ¶ 3.8(b) and, if requested by EPA, an inspection under ¶ 3.8(b)(1), SD shall submit an RA Report to EPA for approval of the completion of the OU 2 RA Soil Component. The report must include: (1) a list of all CD Properties Remaining to be Sampled, CD Properties to be Remediated and sampling/remedial action status of each, (2) compilation of the result letters for all CD Properties Remaining to be Sampled, (3) a list of the CD Completed Properties and CD Completed with Institutional Controls and (4) the report must be marked as containing personally identifiable information.

- (c) If EPA concludes that either the soil or groundwater, surface water, and sediment OU 2 RA is not complete, EPA shall notify SD. EPA's notice shall include a description of any deficiencies. EPA's notice may include a schedule for addressing such deficiencies or may require SD to submit a schedule for EPA approval. SD shall perform all activities described in the notice in accordance with the schedule.
- (d) If EPA concludes, based on the initial or any subsequent RA Report and Monitoring Report, that both the soil and groundwater, surface water and sediment OU 2 RA is complete, EPA shall issue a Certification of RA Completion for OU 2. This certification will constitute the Certification of RA Completion for OU 2 for purposes of the CD for the completed media only, e.g., soil, groundwater, surface water or sediment including Section XV of the CD (Covenants by Plaintiff). Certification of RA Completion for OU 2 will not affect SD's remaining obligations, including other media obligations, ICs obligations, under the CD and in the ICIAP.
- 3.9 Periodic Review Support Plan ("PRSP"). SD shall submit the PRSP for EPA approval. The PRSP addresses the studies and investigations that SD shall conduct to support EPA's reviews of whether the RA for OU 2 is protective of human health and the environment in accordance with Section 121(c) of CERCLA, 42 U.S.C. § 9621(c) (also known as "Five-year Reviews"). SD shall develop the plan in accordance with Comprehensive Five-year Review Guidance, OSWER 9355.7-03B-P (June 2001), and any other relevant five-year review guidances.

#### 3.10 Certifications of Work Completion

- (a) Work Completion Inspection(s). SD shall schedule inspection(s) for the purpose of obtaining EPA's Certification of Work Completion ("Work Completion Inspection"). A separate inspection may be conducted for the OU 2 RA Groundwater, Surface Water, and Sediment and the OU RA Soil Components. The inspection(s) must be attended by SD and EPA and/or their representatives.
- (b) Work Completion Report(s). Following the inspection(s), SD shall submit a report(s) to EPA requesting EPA's Certification of Work Completion. A separate report may be submitted for the OU 2 RA Groundwater, Surface Water, and Sediment and OU 2 RA Soil Components. The report(s) must: (1) include certifications by a registered professional engineer or geologist and by SD's Project Coordinator that the Work is complete; including all site restoration activities, is complete; and (2) be certified in accordance with ¶ 5.5(Certification). If the Monitoring Report and RA Report submitted under ¶ 3.8(a)(1) and ¶ 3.8(b)(2), respectively, include all elements required under these ¶¶, then the Monitoring Report and RA Report suffice to satisfy all requirements under this ¶ 3.10(b).

- (c) If EPA concludes that the Work is not complete for either or both the OU 2 RA Soil or Groundwater, Surface Water, and Sediment Component, EPA shall so notify SD. EPA's notice shall include a description of the activities that SD must perform to complete the Work. EPA's notice shall include specifications and a schedule for such activities or shall require SD to submit specifications and a schedule for EPA approval. SD shall perform all activities described in the notice or in the EPA-approved specifications and schedule.
- (d) If EPA concludes, based on the initial or any subsequent report requesting Certification of Work Completion, that the Work is complete, EPA shall so certify in writing to SD. Issuance of the Certification of Work Completion does not affect the following continuing obligations: (1) activities under the Periodic Review Support Plan; (2) obligations under Sections VIII (Property Requirements), XIX (Retention of Records), and XVIII (Access to Information) of the CD; (3) ICs obligations as provided in the ICIAP; (4) obligations to address contingencies at CD Properties with Institutional Control and ASAOC Properties with Institutional Controls as summarized in ¶ 1.4(a)(5); and (5) reimbursement of EPA's and the State's Future Response Costs under Section X (Payments for Response Costs) of the CD.

#### 4. REPORTING

- 4.1 Progress Reports. Commencing with the month following lodging of the CD and until EPA approves the RA Completion for both the OU 2 RA Groundwater, Surface Water and Sediment and OU 2 RA Soil Components, SD shall submit Progress Reports to EPA on a monthly basis, or as otherwise required by EPA. The reports must cover all activities that took place during the prior reporting period, and shall include:
  - (a) the actions that have been taken toward achieving compliance with the CD;
  - (b) a summary of all results of sampling, tests, and all other data received or generated by SD;
  - (c) a list of all Deliverables that SD submitted to EPA;
  - (d) a description of all activities relating to the RA Construction for OU 2 that are expected to be scheduled for the next two months;
  - (e) an updated RA Schedule, together with information regarding percentage of completion, delays encountered or anticipated that may affect the future schedule for implementation of the Work, and a description of efforts made to mitigate those delays or anticipated delays;
  - (f) a description of any modifications to the work plans or other schedules that SD has proposed or that have been approved by EPA; and

- (g) a description of all activities undertaken in support of the CIP during the reporting period and those to be undertaken in the next two months.
- **4.2 Notice of Progress Report Schedule Changes**. If the schedule changes for any activity described in a Progress Report, including activities required to be described under ¶ 4.1(d), SDs shall notify EPA of such change at least 7 Days before performance of the activity.

#### 5. **DELIVERABLES**

- **5.1 Applicability**. SD shall submit Deliverables for EPA approval or for EPA comment as specified in the SOW. If neither is specified, the Deliverable does not require EPA's approval or comment. ¶¶ 5.2 (In Writing) through 5.4 (Technical Specifications) apply to all Deliverables. ¶ 5.5 (Certification) applies to any Deliverable that is required to be certified. ¶ 5.6 (Approval of Deliverables) applies to any Deliverable that is required to be submitted for EPA approval.
- **5.2** In Writing. As provided in ¶ 94 of the CD, all Deliverables under this SOW must be in writing unless otherwise specified.
- 5.3 General Requirements for Deliverables. All Deliverables must be submitted by the deadlines in the RDRAWP, as applicable. SDs shall submit all Deliverables to EPA in electronic form. Technical specifications for sampling and monitoring data and spatial data are addressed in ¶ 5.4. All other Deliverables shall be submitted to EPA in the electronic form specified by the EPA Project Coordinator. If any Deliverable includes maps, drawings, or other exhibits that are larger than 8.5" by 11", SD shall, if requested by EPA, also provide EPA with paper copies of such exhibits.

#### 5.4 Technical Specifications

- (a) Sampling and monitoring data shall be submitted in standard regional Electronic Data Deliverable format, Excel. Other delivery methods may be allowed if electronic direct submission presents a significant burden or as technology changes.
- (b) Spatial data, including spatially-referenced data and geospatial data, shall be submitted: (1) in the ESRI File Geodatabase format; and (2) as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. If applicable, submissions shall include the collection method(s). Projected coordinates may optionally be included but must be documented. Spatial data shall be accompanied by metadata, and such metadata shall be compliant with the Federal Geographic Data Committee ("FGDC") Content Standard for Digital Geospatial Metadata and its EPA profile, the EPA Geospatial Metadata Technical Specification. An add-on metadata editor for ESRI software, the EPA Metadata

- Editor ("EME"), complies with these FGDC and EPA metadata requirements and is available at <a href="https://edg.epa.gov/EME/">https://edg.epa.gov/EME/</a>.
- (c) Each file must include an attribute name for each site unit or sub-unit submitted. Consult <a href="https://www.epa.gov/geospatial/geospatial-policies-and-standards">https://www.epa.gov/geospatial/geospatial-policies-and-standards</a> for any further available guidance on attribute identification and naming.
- (d) Spatial data submitted by SD does not, and is not intended to, define the boundaries of OU 2.
- **5.5** Certification. All Deliverables that require compliance with this ¶ 5.5 must be signed by the SD's Project Coordinator, or other responsible official of SD, and must contain the following statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

# **5.6** Approval of Deliverables.

- (a) Initial Submissions.
  - (1) After review of any Deliverable that is required to be submitted for EPA approval under the CD or the SOW, EPA shall: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) disapprove, in whole or in part, the submission; or (iv) any combination of the foregoing. SD shall incorporate any comments received from EPA.
  - (2) EPA also may modify the initial submission to cure deficiencies in the submission if: (i) EPA determines that disapproving the submission and awaiting a resubmission would cause substantial disruption to the Work; or (ii) previous submission(s) have been disapproved due to material defects and the deficiencies in the initial submission under consideration indicate a bad faith lack of effort to submit an acceptable Deliverable.
- (b) **Resubmissions**. Upon receipt of a notice of disapproval of an initial submission under ¶ 5.6(a), or if required by a notice of approval upon specified conditions

- under ¶ 5.6(a), SD shall, within 30 Days or such longer time as specified by EPA in such notice, correct the deficiencies and resubmit the Deliverable for approval. After review of the resubmitted Deliverable, EPA may: (1) approve, in whole or in part, the resubmission; (2) approve the resubmission upon specified conditions; (3) modify the resubmission; (4) disapprove, in whole or in part, the resubmission, requiring SD to correct the deficiencies; or (5) any combination of the foregoing.
- (c) **Implementation**. Upon approval, approval upon conditions, or modification by EPA of an initial submission submitted under ¶ 5.6(a) or a resubmission under ¶ 5.6(b), of any Deliverable or any portion thereof: (1) such Deliverable, or portion thereof, will be incorporated into and enforceable under the CD and SOW; and (2) SD shall take any action required by such Deliverable or portion thereof. The implementation of any non-deficient portion of a Deliverable submitted or resubmitted under ¶ 5.6(a) or ¶ 5.6(b) does not relieve SD of any liability for stipulated penalties under Section XIV (Stipulated Penalties) of the CD.
- 5.7 Supporting Deliverables. SD shall develop and submit each of the following supporting Deliverables for EPA approval, except as specifically provided. SD shall develop the Deliverables in accordance with all applicable regulations, guidance, and policies. *See* Section 8 (References). SD shall update each of these supporting Deliverables as necessary or appropriate during the course of the Work and/or as requested by EPA.
  - (a) **Health and Safety Plan**. The Health and Safety Plan ("HASP") shall describe all activities to be performed to protect on site personnel and area residents from physical, chemical, and all other hazards posed by the Work. SD shall develop the HASP in accordance with EPA's Emergency Responder Health and Safety and Occupational Safety and Health Administration requirements under 29 C.F.R. §§ 1910 and 1926. The HASP shall cover RD activities and shall be updated, as appropriate, to cover activities during the RA and to cover activities after RA completion. SD must ensure that all necessary elements are included and that the plan provides for the protection of human health and the environment. EPA will review the HASP, though it does not approve the HASP. SD shall incorporate any comments from EPA into the HASP.
  - (b) Emergency Response Plan. The Emergency Response Plan ("ERP") must describe procedures to be used in the event of an accident or emergency at the Site (for example, power outages, water impoundment failure, treatment plant failure, slope failure, etc.). The SD shall submit the ERP to EPA for comment, though not for approval. Nevertheless, the SD shall incorporate into the ERP any comments from EPA and include:
    - (1) the name of the person or entity responsible for responding in the event of an emergency incident;

- (2) the plan and date(s) for meeting(s) with the local community, including local, State, and federal agencies involved in the cleanup, as well as local emergency squads and hospitals;
- (3) a Spill Prevention, Control, and Countermeasures (SPCC) Plan (if applicable), consistent with the regulations under 40 C.F.R. Part 112, describing measures to prevent, and contingency plans for, spills and discharges;
- (4) notification activities in accordance with ¶ 3.5(b) (Release Reporting) in the event of a release of hazardous substances requiring reporting under Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004; and
- (5) a description of all necessary actions to ensure compliance with ¶ 11 (Emergencies and Releases) of the CD in the event of an occurrence during the performance of the Work that causes or threatens a release of Waste Material from the Site that constitutes an emergency or may present an immediate threat to public health or welfare or the environment.
- (c) Field Sampling Plan for the OU 2 RA Groundwater, Surface Water, and **Sediment Component.** The Groundwater, Surface Water, and Sediment FSP must identify the wells to be included in the groundwater monitoring for the north of the East Branch of Brown Ditch and east of the Main Branch of Brown Ditch, and identify any new wells that are to be constructed for the monitoring. The Groundwater, Surface Water, and Sediment FSP shall address all groundwater sample collection activities, including those from private wells, as well as all surface water and sediment sampling activities in the East Branch of Brown Ditch. The Groundwater, Surface Water, and Sediment FSP must be written so that a field sampling team unfamiliar with the project would be able to gather the samples and field information required. SD shall develop the Groundwater, Surface Water, and Sediment FSP in accordance with Guidance for Conducting Remedial Investigations and Feasibility Studies, EPA/540/G 89/004 (Oct. 1988). The Groundwater, Surface Water, and Sediment FSP shall include a provision for SD to provide EPA and IDEM with notice at least 21 Days prior to any sample collection activity (unless EPA and IDEM agree to a more expedited schedule).
  - (1) SD will assure access to monitoring wells for the SD, EPA, and IDEM to sample, inspect, monitor, carry out the RA for OU 2, and ensure the short-and long-term effectiveness of the remedy.
  - (2) SD shall report private well results to each owner of the private well in a letter that is approved by EPA that includes, but is not limited to, all sampling data gathered.

- (3) Should CCR-derived groundwater impacts in private wells above Groundwater Cleanup Levels be identified, SD shall immediately provide the homeowner with bottled water service, work with EPA, IDEM, and the homeowner to address the exceedance, and work with EPA and IDEM to investigate the root cause(s) thereof.
- (d) **Field Sampling Plan for the OU 2 RA Soil Component.** The Soil FSP shall address all sample collection activities for all CD Properties Remaining to be Sampled. The Soil FSP must be written so that a field sampling team unfamiliar with the project would be able to gather the samples and field information required. SD shall develop the FSP in in accordance with *Guidance for Conducting Remedial Investigations and Feasibility Studies*, EPA/540/G 89/004 (Oct. 1988). The Soil FSP shall include a provision for SD to provide EPA and IDEM with notice at least 14 Days prior to any sample collection activity (unless EPA and IDEM agree to a more expedited schedule). SD shall report soil results from sampled CD Properties Remaining to be Sampled to each owner of the Property in a letter that is approved by EPA and includes, but is not limited to, all sampling data gathered.
- (e) Quality Assurance Project Plan. The Quality Assurance Project Plan ("QAPP") augments the FSPs and addresses sample analysis and data handling regarding the Work. The QAPP must include a detailed explanation of SD's quality assurance, quality control, and chain of custody procedures for all treatability, design, compliance, and monitoring samples. SD shall develop the QAPP in accordance with EPA Requirements for Quality Assurance Project Plans, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006); Guidance for Quality Assurance Project Plans., QA/G-5, EPA/240/R 02/009 (Dec. 2002); and Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A though 900C (Mar. 2005). The QAPP also must include procedures:
  - (1) to ensure that EPA, IDEM, and their authorized representatives have reasonable access to laboratories used by SD in implementing the CD (SD's Labs);
  - (2) to ensure that SD's Labs analyze all samples submitted by EPA pursuant to the QAPP for quality assurance monitoring;
  - (3) to ensure that SD's Labs perform all analyses using EPA-accepted methods (i.e., the methods documented in *USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis*, ILM05.4 (Dec. 2006); *USEPA Contract Laboratory Program Statement of Work for Organic Analysis*, SOM01.2 (amended Apr. 2007); and *USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration)*, ISM01.2 (Jan. 2010)) or other methods acceptable to EPA;

- (4) to ensure that SD's Labs perform all analyses using EPA-accepted methods (i.e., the methods documented in *USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis*, ILMO5.4 (Dec. 2006); *USEPA Contract Laboratory Program Statement of Work for Organic Analysis*, SOM01.2 (amended Apr. 2007); and *USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration)*, ISM01.2 (Jan. 2010)) or other methods acceptable to EPA;
- (5) to ensure that SD's Labs participate in an EPA-accepted Quality Assurance/Quality Control ("QA/QC") program or other program QA/QC acceptable to EPA;
- (6) for SD to provide split samples and/or duplicate samples to EPA and IDEM upon request;
- (7) for EPA and IDEM to take any additional samples that they deem necessary;
- (8) for EPA and IDEM to provide to SD, upon request, split samples and/or duplicate samples in connection with EPA's and/or IDEM's oversight sampling; and
- (9) for SD to submit to EPA and IDEM all sampling and tests results and other data in connection with the implementation of the CD.
- (f) Affected Property Dust Monitoring Plan. A Dust Monitoring Plan will be prepared as a component of the RDRAWP. The Dust Monitoring Plan will be tailored for work at CD Properties to be Remediated and, if further soil excavation is needed to address contingencies, at CD Properties with Institutional Controls and ASAOC Properties with Institutional Controls for which access is provided to conduct the remedy; the specifics will be included in the Remedial Design Package ¶ 3.3.
- (g) Construction Quality Assurance/Quality Control Plan (CQA/QCP). The purpose of the Construction Quality Assurance Plan ("CQAP") is to describe planned and systemic activities that provide confidence that the RA construction will satisfy all plans, specifications, and related requirements, including quality objectives. The purpose of the Construction Quality Control Plan ("CQCP") is to describe the activities to verify that RA construction has satisfied all plans, specifications, and related requirements, including quality objectives. The CQA/QCP must:
  - (1) identify, and describe the responsibilities of, the organizations and personnel implementing the CQA/QCP;

- (2) describe the Performance Standards required to be met to achieve Completion of the RA;
- (3) describe the activities to be performed: (i) to provide confidence that Performance Standards will be met; and (ii) to determine whether Performance Standards have been met;
- (4) describe verification activities, such as inspections, sampling, testing, monitoring, and production controls, under the CQA/QCP;
- (5) describe industry standards and technical specifications used in implementing the CQA/QCP;
- (6) describe procedures for tracking construction deficiencies from identification through corrective action;
- (7) describe procedures for documenting all CQA/QCP activities; and
- (8) describe procedures for retention of documents and for final storage of documents.
- (h) **Transportation and Off-Site Disposal Plan**. The Transportation and Off-Site Disposal Plan ("TODP") describes plans to ensure compliance with ¶ 3.6 (Off-Site Shipments). The TODP must include:
  - (1) the proposed routes for off-site shipment of Waste Material;
  - (2) an identification of communities affected by shipment of Waste Material; and
  - (3) a description of plans to minimize impacts on affected communities.
- (i) Institutional Controls Implementation and Assurance Plan. The ICIAP shall describe plans to implement, maintain, and enforce the ICs at the Site. SD shall develop the ICIAP in accordance with Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites, OSWER 9355.0-89, EPA/540/R-09/001 (Dec. 2012), and Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites, OSWER 9200.0-77, EPA/540/R-09/02 (Dec. 2012). The ICIAP must include the following additional requirements:
  - (1) the locations of recorded real Property interests (e.g., easements, liens) and resource interests in the Property that may affect ICs (e.g., surface, mineral, and water rights) including accurate mapping and geographic information system (GIS) coordinates of such interests;

- (2) the legal descriptions and survey maps that are prepared according to current American Land Title Association (ALTA) Survey guidelines and certified by a licensed surveyor;
- provisions regarding implementation, maintenance, enforcement, and modification of Section VIII of the CD and ¶¶1.4(a)(5), 1.4(a)(6) and 1.4(c) of this SOW; and
- (4) a provision that states SD will use best efforts to secure non-settling owner's cooperation in executing and recording Proprietary Controls that grant a right of access to conduct any activity identified in the CD or this SOW and grant the right to enforce the land, water, or other resource use restrictions in the CD or this SOW.

#### 6. SCHEDULES

**6.1 Applicability and Revisions**. All Deliverables and tasks required under this SOW must be submitted or completed by the deadlines or within the time durations listed in the RD/RA Schedules set forth below. SD may submit proposed revised RD/RA Schedules for EPA approval. Upon EPA's approval, the revised RD/RA Schedules supersede the RD/RA Schedules set forth below, and any previously approved RD/RA Schedules.

#### 6.2 RD/RA Schedule.

Item No.	Description of Deliverable, Task	¶ Reference	Deadline
1	RDRAWP for OU 2 Soil Component	3.1	90 Days after EPA's Authorization to Proceed regarding Supervising Contractor under CD
2	HASP	5.7(a)	With the RDRAWP
3	ERP	5.7(b)	With the RDRAWP
4	Soil FSP	5.7(d)	With the RDRAWP
5	Dust Monitoring Plan	5.7(f)	With the RDRAWP
6	CQA/QCP	5.7(g)	With the RDRAWP
7	TODP	5.7(h)	With the RDRAWP

8	revised RDRAWP	3.1	45 Days after receipt of comments from EPA on the RDRAWP and associated Plans
9	Groundwater, Surface Water, and Sediment FSP	5.7(c)	45 Days after EPA approval of the RDRAWP
10	QAPP	5.7(e)	45 Days after EPA approval of the RDRAWP
11	ICIAP	5.7(i)	45 Days after EPA approval of the RDRAWP
12	RD Package for CD Properties to be Remediated	3.3	90 Days after access is obtained for removal activities; but no sooner than 90 Days after approval of Final RDRAWP.
13	start of soil removal CD Properties to be Remediated where access is provided		As allowed by each Property owner and as identified in the Final Remedial Design Package, weather permitting but no later than 180 Days after access is granted or as otherwise approved by EPA
14	OU 2 RA Soil Component RA Report for CD Properties to be Remediated	3.7(c)	To EPA for review 90 Days after completion of activity including restoration at the Property; to Property owners 14 Days after EPA approval of the report
15	Work Completion Inspection	3.10(a)	Within 15 Days after completion of soil removal work, if required by EPA
16	Work Completion Report for OU 2 RA Soil Component	3.10(b)	90 Days after completion of the OU 2 RA Soil Component, or after the final Completion Inspection, if required by EPA

17	Work Completion Report for OU 2 RA Groundwater, Surface Water, and Sediment Component	3.10(b)	90 Days after EPA's approval of the Final Monitoring Report, or after the final Completion Inspection, if required by EPA
18	OU 2 Groundwater, Surface Water, and Sediment Component Groundwater Construction Completion Report	3.7(a)(2)	If necessary, 45 Days after completion of monitoring well construction
19	annual reporting of monitoring data	1.4(b)(5)	90 Days after completion of the annual groundwater monitoring event
20	report of private well results	5.7(c)(2)	Preliminary data provided to EPA ASAP but no later than 14 Days of receipt by SD. Report to EPA 90 Days after completion of the private well sampling. Report to each owner 14 Days after approval of the report by EPA.
21	Final Monitoring Report of the OU 2 RA Groundwater, Surface Water, and Sediment Component	3.8(a)(1)	90 Days after all RA performance Standards have been met,
22	Periodic Review Support Plan	3.9	Four (4) years after groundwater monitoring construction is complete
23	Progress Reports	4.1	Monthly, on the 15th Day after the end of each month, or as otherwise required by EPA

# 7. STATE PARTICIPATION

**7.1 Copies.** SD shall, at any time they send a Deliverable to EPA, send a copy of such Deliverable to IDEM. EPA shall, at any time it sends a notice, authorization, approval, disapproval, or certification to SD, send a copy of such document to IDEM.

- **7.2 Review and Comment.** IDEM will have a reasonable opportunity for review and comment prior to:
  - (a) any EPA approval or disapproval under ¶ 5.6 (Approval of Deliverables) of any Deliverables that are required to be submitted for EPA approval; and
  - (b) any approval or disapproval of the Construction phase under ¶ 3.7 (RA Construction Completion for OU 2), any disapproval of, or Certification of RA Completion under ¶ 3.8 (Certification of RA Completion for OU 2), and any disapproval of, or Certification of Work Completion under ¶ 3.10 (Certification of Work Completion).

#### 8. REFERENCES

## **8.1** Website Locations.

A more complete list of references provided in 8.3 may be found on the following EPA Web pages:

Laws, Policy, and Guidance:

https://www.epa.gov/superfund/superfund-policy-guidance-and-laws

Test Methods Collections:

https://www.epa.gov/measurements/collection-methods

# 8.2 Applicability

For any regulation or guidance referenced in the CD or SOW, the reference will be read to include any subsequent modification, amendment, or replacement of such regulation or guidance. Such modifications, amendments, or replacements apply to the Work only after SD receives notification from EPA of the modification, amendment, or replacement.

#### 8.3 Specific References.

The following regulations and guidance documents, among others, apply to the Work. Any item for which a specific URL is not provided below is available on one of the two EPA Web pages listed in  $\P$  9.2:

- (a) A Compendium of Superfund Field Operations Methods, OSWER 9355.0-14, EPA/540/P-87/001a (Aug. 1987).
- (b) CERCLA Compliance with Other Laws Manual, Part I: Interim Final, OSWER 9234.1-01, EPA/540/G-89/006 (Aug. 1988).

- (c) Guidance for Conducting Remedial Investigations and Feasibility Studies, OSWER 9355.3-01, EPA/540/G-89/004 (Oct. 1988).
- (d) CERCLA Compliance with Other Laws Manual, Part II, OSWER 9234.1-02, EPA/540/G-89/009 (Aug. 1989).
- (e) Guidance on EPA Oversight of Remedial Designs and Remedial Actions Performed by Potentially Responsible Parties, OSWER 9355.5-01, EPA/540/G-90/001 (Apr.1990).
- (f) Guidance on Expediting Remedial Design and Remedial Actions, OSWER 9355.5-02, EPA/540/G-90/006 (Aug. 1990).
- (g) Guide to Management of Investigation-Derived Wastes, OSWER 9345.3-03FS (Jan. 1992).
- (h) Permits and Permit Equivalency Processes for CERCLA On-Site Response Actions, OSWER 9355.7-03 (Feb. 1992).
- (i) Guidance for Conducting Treatability Studies under CERCLA, OSWER 9380.3-10, EPA/540/R-92/071A (Nov. 1992).
- (j) National Oil and Hazardous Substances Pollution Contingency Plan; Final Rule, 40 C.F.R. Part 300 (Oct. 1994).
- (k) Guidance for Scoping the Remedial Design, OSWER 9355.0-43, EPA/540/R-95/025 (Mar. 1995).
- (1) Remedial Design/Remedial Action Handbook, OSWER 9355.0-04B, EPA/540/R-95/059 (June 1995).
- (m) EPA Guidance for Data Quality Assessment, Practical Methods for Data Analysis, QA/G-9, EPA/600/R-96/084 (July 2000).
- (n) Operation and Maintenance in the Superfund Program, OSWER 9200.1-37FS, EPA/540/F-01/004 (May 2001).
- (o) Comprehensive Five-year Review Guidance, OSWER 9355.7-03B-P, 540-R-01-007 (June 2001).
- (p) Guidance for Quality Assurance Project Plans, QA/G-5, EPA/240/R-02/009 (Dec. 2002).
- (q) Institutional Controls: Third Party Beneficiary Rights in Proprietary Controls (Apr. 2004).

- (r) Quality management systems for environmental information and technology programs -- Requirements with guidance for use, ASQ/ANSI E4:2014 (American Society for Quality, February 2014).
- (s) Uniform Federal Policy for Quality Assurance Project Plans, Parts 1-3, EPA/505/B-04/900A though 900C (Mar. 2005).
- (t) Superfund Community Involvement Handbook, SEMS 100000070 (January 2016) available at <a href="https://www.epa.gov/superfund/community-involvement-tools-and-resources">https://www.epa.gov/superfund/community-involvement-tools-and-resources</a>.
- (u) EPA Guidance on Systematic Planning Using the Data Quality Objectives Process, QA/G-4, EPA/240/B-06/001 (Feb. 2006).
- (v) EPA Requirements for Quality Assurance Project Plans, QA/R-5, EPA/240/B-01/003 (Mar. 2001, reissued May 2006).
- (w) EPA Requirements for Quality Management Plans, QA/R-2, EPA/240/B-01/002 (Mar. 2001, reissued May 2006).
- (x) USEPA Contract Laboratory Program Statement of Work for Inorganic Analysis, ILM05.4 (Dec. 2006).
- (y) USEPA Contract Laboratory Program Statement of Work for Organic Analysis, SOM01.2 (amended Apr. 2007).
- (z) EPA National Geospatial Data Policy, CIO Policy Transmittal 05-002 (Aug. 2008), available at <a href="https://www.epa.gov/geospatial/geospatial-policies-and-standards">https://www.epa.gov/geospatial/geospatial-policies-and-standards</a> and <a href="https://www.epa.gov/geospatial/epa-national-geospatial-data-policy">https://www.epa.gov/geospatial/epa-national-geospatial-data-policy</a>.
- (aa) Summary of Key Existing EPA CERCLA Policies for Groundwater Restoration, OSWER 9283.1-33 (June 2009).
- (bb) Principles for Greener Cleanups (Aug. 2009), available at <a href="https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups">https://www.epa.gov/greenercleanups/epa-principles-greener-cleanups</a>.
- (cc) USEPA Contract Laboratory Program Statement of Work for Inorganic Superfund Methods (Multi-Media, Multi-Concentration), ISM01.2 (Jan. 2010).
- (dd) Close Out Procedures for National Priorities List Sites, OSWER 9320.2-22 (May 2011).
- (ee) Groundwater Road Map: Recommended Process for Restoring Contaminated Groundwater at Superfund Sites, OSWER 9283.1-34 (July 2011).

- (ff) Recommended Evaluation of Institutional Controls: Supplement to the "Comprehensive Five-Year Review Guidance," OSWER 9355.7-18 (Sep. 2011).
- (gg) Construction Specifications Institute's MasterFormat 2012, available from the Construction Specifications Institute, http://www.csiresources.org./home.
- (hh) Updated Superfund Response and Settlement Approach for Sites Using the Superfund Alternative Approach, OSWER 9200.2-125 (Sep. 2012)
- (ii) Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites, OSWER 9355.0-89, EPA/540/R-09/001 (Dec. 2012).
- (jj) Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites, OSWER 9200.0-77, EPA/540/R-09/02 (Dec. 2012).
- (kk) EPA's Emergency Responder Health and Safety Manual OSWER 9285.3-12

  <a href="https://www.epaosc.org/">https://www.epaosc.org/</a> HealthSafetyManual/manual-index.htm.
- (II) Broader Application of Remedial Design and Remedial Action Pilot Project Lessons Learned, OSWER 9200.2-129 (Feb. 2013).
- (mm) Guidance for Evaluating Completion of Groundwater Restoration Remedial Actions, OSWER 9355.0-129 (Nov. 2013).
- (nn) Groundwater Remedy Completion Strategy: Moving Forward with the End in Mind, OSWER 9200.2-144 (May 2014).
- (oo) Providing Communities with Opportunities for Independent Technical Assistance in Superfund Settlements, Interim (Sep. 2009).
- (pp) Guidance for Management of Superfund Remedies in Post Construction, OLEM 9200.3-105(Feb. 2017), https://www.epa.gov/superfund/superfund-post-construction-completion.